

VOROB'YEVA, L. A.

VOROB'YEVA, L. A. --"Solonetz Soils of the Western Caspian Region." Soil
Biology Faculty. Moscow, 1956. (Dissertation for the Degree of
Candidate in Biological Sciences.)

So.: Knizhnaya Litopis', No 7, 1956.

KAMAY, GIL'm, CHERNOKAL'SKIY, B.D.; VOROB'YEVA, L.A.

Interaction of trialkylarsine oxides with alkyl halides. Dokl. AN
SSSR 145 no.2:323-329 J1 '62. (MIRA 15:7)

1. Kazanskij khimiko-tehnologicheskiy institut imeni Kirova.
Predstavлено академиком A.Ye.Arbusovym.
(Arsine oxide) (Alkyl halides)

SHCHEGOLEV, N.N.; VOROB'YEVA, L.D.

Experiment in the reorganization of shops for fancy men's footwear.
Kozh.-obuv.prom. 3 no.2, 26-28 F '61. (MIPA 14:4)
(Shoe manufacture) (Assembly-line methods)

VOROB'YEVA, L.D., inzh.; SHCHEGOLEV, N.N., inzh.

Organizing cyclic feeding of lasts. Kozh.-obuv.prom. no.9:
(MIRA 13:2)
32-34 S '59.
(Shoe manufacture) (Assembly-line methods)

VOROB'YVA, L.I., Cand. Bio. Sci.—(diss.) "Fermentation of various sources of carbon with propionic acid bacteria." loc, 1958. 19 pp with diagrams (Acad Sci USSR. Inst of Microbiology), 130 copies (KL, 45-58, 144)

- 48 -

ABEYDULINA, V.A.; ANNENKOV, G.V.; YEPKHIYEVA, L.G.; VOROB'YEVA,
L.I., red.

[Methodology for determining the level of production mechanization in confectionery enterprises] Metodika opredeleniya
urovnia mekhanizatsii proizvodstva na predpriatiiakh kondi-
terskoi promyshlennosti. Moskva, Izd-vo "Pishchevaya promysh-
lennost', 1964. 99 p. (MIRA 17:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut kon-
ditorskoy promyshlennosti. 2. TSentral'nyy nauchno-issledova-
tel'skiy institut konditorskoy promyshlennosti, otdel ekonomiki
(for Abeydulina, Annenkov, Yepkhiyeva).

VOROB'YEVA, L.I.

Carbon balance during the fermentation of lactic and pyruvic acids
by Proprenibacterium. [with summary in English] Mikrobiologija
27 no.3:287-293 My-Je '58 (MIRA 11:9)

1. Institut mikrobiologii AN SSSR.
(PROPIONIBACTERIUM, metabolism
lactic & pyruvic acid fermentation, eff. on carbon
balance (Rus))
(LACTIC ACID,
fermentation by Propionibacterium, eff. on carbon
balance (Rus))
(PYRUVATES,
same (Rus))

VOROB'YEVA, L.I.

Effect of some trace elements on vitamin B₁₂ production by propionic acid bacteria. Dokl.AN SSSR 138 no.2:450-453 My '61. (MIRA 14:5)

1. Institut mikrobiologii nauk SSSR. Predstavлено академиком V.N. Shaposhnikovym.
(Cyanocobalamin) (Trace elements) (Propionibacterium)

KURKO, V.I., red.; VOROB'YEVA, L.I., red.; SOKOLOVA, I.A., tekhn.red.

[Smoking of meat products; popular presentation of the scientific principles of smoking] Kopchenie izdelii iz miasa; populiarnoe izlozhenie nauchnykh osnov kopcheniya. Moskva, pishchepromizdat, 1963. 86 p. (MIRA 17:3)

SOV/20-121-2-45/53

AUTHOR:

Vorob'yeva, L. I.

TITLE:

The Conditions for the Glycerin Fermentation by Propioni-
bacteriae (Usloviya sbrazhivaniya glitserina propionovokislyimi
bakteriyami)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 362-365
(USSR)

ABSTRACT:

The author found that the bacteria mentioned cannot ferment glycerin in contrast to lactic and pyruvic acids. The high degree of the reduction (vosstanovlennost') of the glycerin molecule on the one hand and the lack of the corresponding hydrogen acceptors on the other hand apparently did not create any favorably conditions for the constructive exchange in the bacterial nutrient on a synthetic medium. The Propionibacterium Jensenii of Swiss cheese was used for the experiments. A simple medium was produced: $(\text{NH}_4)_2\text{SO}_4$ 0,3%, K_2HPO_4 0,2%, glycerin 1%; vitamins: pantothenic acid 100 - 1 000 $\mu\text{/l}$, biotin 0,2 - 1 $\mu\text{/l}$, thiamin 10 - 50 $\mu\text{/l}$. According to Kvestell three conditions are required for the development of bacteria:
1) The organism must be capable of activating the present or-

Card 1/4

SOV/20-121-2-45/53

The Conditions for the Glycerin Fermentation by Propionibacteriae

ganic compound - the hydrogen acceptor. 2) In the transformation of the organic matter energy must be freed which is used by the bacteria for purposes of synthesis; 3) The organic matter itself or its decomposition products must be suited for the formation of the bacterial cell (according to Ref 1). In view of the properties of the glycerin molecule the synthetic medium selected did not meet with any of the three demands mentioned, and no development took place in it. Only when fumaric acid was added as hydrogen acceptor (0,1%) the glycerin fermentation set in (Table 1). From this may be seen that without fumaric acid no formation of bacteria takes place. On fumaric acid alone they cannot form either. The participation of fumaric acid in the constructive metabolism is possible which fact was substantiated by the determination of the biomass (Table 2). The presence of fumaric acid triples the biomass and lengthens the bacterial cells. Fumaric acid possibly substituted the lacking carboxylic acid. Only in higher inoculation rates (6 instead of 3%) the oxygen stimulated the development (Table 3). In the case of a 3% inoculation the glycerin fermentation could be achieved by the addition of 0,07 - 0,1% of yeast autolyzate (Table 4). The addition of

Card 2/4

SOV/20-121-2-45/53

The Conditions for the Glycerin Fermentation by Propionibacteriae

asparagic acid (0,2%) promoted the formation of bacteria only on aerobic conditions (Table 5). Finally the dynamics of the development of the bacteria with 0,2% asparagic acid and a 6% inoculation was investigated on relatively anaerobic conditions (Table 6). Besides propionic acid also acetic acid is formed in the fermentation. The work was carried out under the supervision of V. N. Shaposhnikov, Member, Academy of Sciences, USSR. There are 1 figure, 6 tables, and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology, AS USSR)

PRESENTED: March 20, 1958, by V. N. Shaposhnikov, Member, Academy of Sciences, USSR

SUBMITTED: March 15, 1958

Card 3/4

SOV/20-121-2-45/53

The Conditions for the Glycerin Fermentation by Propionibacteriae

Card 4/4

VOROB'YEVA, L.I.

Effect of some trace elements on the development and formation of
vitamin B₁₂ by propionibacteria; toxic effect of Zn ions. Dokl.
AN SSSR 145 no.6:1381-1384 Ag '62. (MIRA 15:8)

1. Predstavлено академиком V.N.Shaposhnikovym.
(Cyanocobalamin) (Zinc-Toxicology) (Propionibacterium)

VOROB'YEVA, L. I.

Effect of sodium hyposulfite on the biosynthesis of vitamin B₁₂
by Propionibact. Jensenii. Dokl. AN SSSR 146 no.3:693-695 S 762.
(MIRA 15:10)

1. Institut mikrobiologii AN SSSR. Predstavлено академиком V.N.Shaposhnikovym.
(SODIUM THIOSULPHATE) (CYANOCOBALAMIN) (PROPIONIBACTERIUM)

SHAPOSHNIKOV, V.N.; VOROB'YEVA, L.I.

Development of propionibacterium and the synthesis of vitamin B₁₂
on synthetic and natural media. Mikrobiologija 32 no.2:204-208
Mr-Ap '63. (MIRA 17:9)

1. Institut mikrobiologii AN SSSR.

VOROB'YEVA, L.I.; KUZNETSOVA, V.S.

Effect of MnSO₄ on the formation of vitamin B-12 by propionic acid bacteria. Mikrobiologija 33 no.1:26-30 Ja-F '64.
(MIRA 17:9)

1. Institut mikrobiologii AN SSSR.

KRAMLI, A.; VOROB'YEVA, L.I.

Effect of oxidation-reduction conditions on the formation of vitamin B₁₂ by propionic acid bacteria. Mikrobiologija 33 no.3:408-414
(MIRA 18:12)
My-Jo '64.

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo
universiteta. Submitted March 26, 1963.

VOROB'YEVA, L.I.

Separation of cobalamins by the thin-layer chromatography
method. Mikrobiologiya 34 no.1:180-183 Ja-F '65. (MIRA 18:7)

1. Biolcgo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo
universiteta imeni M.V. Lomonosova.

Video Review: *Death*

is S. Levite

VOROB'YEEVA L. M.

USSR/Physiology of Plants - Photosynthesis.

I-1

Ab's Jour : Ref Zhur - Biol., No 3, 1958, 10353

Author : Krasnovskiy, A.A., Vorob'yeva, L.M., Pakshina, Ye.V.

Inst : Institute of Biochemistry, Academy of Sciences USSR

Title : Investigation of the Photochemically Active Form of Chlorophyll in Plants of Various Systematic Groups.

Orig Pub : Fiziol. rasteniy, 1957, 4, No 2, 124-133

Abstract : Using as subjects of research plants of various systematic groups the absorption spectra in the red area of the spectrum and the kinetics of chlorophyll bleaching were investigated over the whole of the vegetation period. A detailed method of acquiring "green solutions" is given, as are measurements of the kinetics of bleaching and of the absorption spectra. Chlorophyll bleaching after irradiation with intense red light varied within the limits of 1-30%.

Card 1/2

USSR/Physiology of Plants - Photosynthesis.

I-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10353

depending upon the plant; it was not correlated with their position in the system /sistematicheskoye polozheniye/. Beet, orache (Atriplex), marchantia, poplar, fern, and willow possessed the greatest bleaching intensity, while in most plants bleaching varied between 5% and 7%. In plants with the highest bleaching percent the absorption maximum was displaced several m into the short-wave part, thus confirming the presence of a large quantity of the monomeric (active) form of chlorophyll in their chloroplasts. When the monomeric form is separated by centrifugation from the more heavily aggregated form, the absorption maximum is displaced 2-6 m into the short-wave part. The bleaching process was invariably accompanied by displacement of the maximum into the long-wave part. In June and July there was 20-30% bleaching in the sugar beet, while it was only 3-6% in September and October. The project was completed in the Institute of Biochemistry, Academy of Sciences USSR.

Card 2/2

VOROB'YEVA, L.M., KRASNOVSKIY, A.A.

Reversible photoreduction of chlorophyll and sensitized reactions
in homogenates of sugar beet leaves [with summary in English]
Biokhimiia 23 no.5:760-771 S-0 '58 (MIRA 11:11)

1. Institut biokhimii imeni A.N. Bakha AN SSSR, Moskva.
(PLANTS, EFFECT OF LIGHT ON)
(CHLOROPHYLL)
(PLANTS, EFFECT OF ASCORBIC ACID ON)

BELAVTSEVA, Ye.M.; VOROBIEVA, L.M.; KRASNOVSKIY, A.A.

Study of the structure of aggregated chlorophyll. Biofizika 4
no.5:521-532 '59. (MIRA 14:6)

1. Institut biokhimii imeni A.N.Bakha AN SSSR, Moskva i Laboratoriya
elektronnoy mikroskopii AN SSSR, Moskva.
(CHLOROPHYLL)

VOROB'YEVA, L.N., zootehnik

Characteristics of the development of new lines of Urzhum boars.
Zhivotnovodstvo 22 no.2:43-48 F '60. (MIRA 15:11)
(Kirov Province--Boars)

VOROBYEVA, L. M., DROZDOVA, N. N., YEROKHIN, YU. YE., KRASNOVSKY, A. A.,
PAKSHINA, YE. V., UMRIKHINA, A. V., BRIN, G. P. (USSR)

"Different Forms of Chlorophyll and its Analogues and their
Role in Processes of Photochemical Electron (or Hydrogen)
Transfer."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961

DOMAN, N.G.; KRASNOVSKIY, A.A.; ROMANOVA, A.K.; VOROB'YEVA, L.M.; PAKSHINA, Ye.
V.; TERENT'YEVA, Z.A.

Chlorophyll synthesis and carbon dioxide fixation in etiolated barley
seedlings during exposure to light. Fiziol. rast. 8 no.1:3-12 '61.
(MIRA 14:3)

I. A.N. Bakh Institute of Biochemistry, U.S.S.R. Academy of Sciences,
Moscow. (Chlorophyll) (Photosynthesis)

VOROB'YEVA, L.M.; BYSTROVA, M.I.; KRASNOVSKIY, A.A.

Phytolic and nonphytolic forms of pigments in leaves and homogenates.
Biokhimiia 28 no.3:524-534 My-Je '63. (MIRA 17:2)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,
Moscow.

LETOKHOV, V.S.; VATSURA, V.V.; PUKHLIK, Yu.A.; FEDOTOV, D.I.; KOGOZHIKHIN, A.S.; ZHABOTINSKIY, M.Ye.; DASHEVSKAYA, Ye.I.; KOZLOV, A.N.; RUVINSKIY, L.G.; VASIN, V.A.; YURGENEV, L.S.; NOVOMIROVA, I.Z.; PETROVA, G.N.; SHCHEDROVITSKIY, S.S.; BELYAYEVA, A.A.; BRYKINA, L.I.; GLEBOV, V.M.; DRONOV, M.I.; KONOVALOV, M.D.; TARAPIN, V.N.; MIKHAYLOVSKIY, S.S.; ZHEGALIN, V.G.; ZHABIN, A.I.; GRIBOV, V.S.; MAL'KOV, A.P.; CHERNOV, V.N.; RATNOVSKIY, V.Ya.; VOROB'YEVA, L.M.; MILOVANOVA, M.M.; ZARIPOV, M.F.; KULIKOVSKIY, L.F.; GONCHARSKIY, L.A.; TYAN KHAK SU

Inventions.. Avtom. i prib. no.1:78-80 Ja-Mr '65. (MIRA 18:8)

RAKHSHTADT, A.G., kand.tekhn.nauk; ROGEL'BERG, I.L., kand.tekhn.nauk;
VOROB'YEVA, L.P., inzh.; PUCHKOV, B.I., inzh.

Effect of heat treatment on the properties and structure of
beryllium bronze. Metalloved.i term.obr.met. no.2:20-31 F '60.

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana
1 Giprosvetmetobrabotka.
(Bronze--Heat treatment)
(Copper-Beryllium alloys--Metallography)

18.1215,18.7100

77592
SOV/129-60-2-5/13

AUTHORS: Rakhshadt, A. G., Rogel'berg, I. L. (Candidates of Technical Sciences), Vorob'yeva, L. P., Puchkov, B. I. (Engineers)

TITLE: Effect of Heat Treatment on Properties and Structure of Beryllium Bronze

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1960, Nr 2, pp 20-31 (USSR)

ABSTRACT: Beryllium bronze possesses elastic properties, high corrosion resistance, and adequate electric conductivity. It is used for the elastic elements of instruments and devices. Inasmuch as previous works failed to study the elastic properties of this bronze, the authors investigated elastic and relaxation properties of the bronze prepared in the form of thin strip. The modulus of elasticity was determined by the dynamic method according to the frequency of resonant-type vibration of a cantilever

Card 1/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze77592
SOY/129-60-2-5/13

specimen. Elastic limit was determined by means of longitudinal bending of the specimen according to the method described in Rakhshtadt, A. G., and Shtremel', M. A., Collection MVTU imeni Bauman, Physical Metallurgy and Heat Treatment, Mashgiz, 1955. Residual elongation of the external fiber was calculated by formulas of Ye. P. Popov (Popov, Ye. P., Theory and Calculation of Flexible Elastic Parts, Publishing House LKVVIA, 1947). Permissible residual deformation in determining elastic limit amounted to 0.001 to 0.01%. Relaxation characteristic was determined on the strip bend around mandrels of various diameters. The following types of bronze were investigated: (1) Br B2 (Be, 2.07; Ni, 0.2%); (2) Br B2.5 (Be, 2.56; Ni, 0.31%); (3) Br BNT (Be, 1.9 to 2.02; Ni, 0.32; T, 0.19%). For this purpose, 10-kg ingots 40 mm thick were hot-rolled at 600-800° C into 4.5 mm thick strip with maximal reduction of 20-30%

Card 2/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze77592
SOV/129-60-2-5/13

per pass. Rolled strip was hardened from 800° C (holding time 1 hr and water quenching). After pickling, specimens were cold-rolled and hardened according to the above rates at strip thicknesses of 3, 1.5, and 0.7 mm. Then, the strip was rolled to 0.6, 0.43, 0.33, and 0.30 mm thickness. Subsequently, the specimens were hardened in water from 780 to 790° C and rolled to an identical thickness of 0.3 mm; i.e., with reductions of 50, 30, and 10% and without deformation. Hardening from 780 to 790° C (holding for 10 min and water-cooling at 20° C) was done, since such heating brings about a sufficient concentration of beryllium in alpha-solution and fine grain structure (10-15 μ grains). Mechanical and physical properties of the above bronze specimens corresponded to those given in literature for bronzes containing 2 and 2.5% Be. Figure 2 shows changes of elastic properties, hardness, and electrical resistance of bronze Br B2.5 under the effect of tempering. Similar figures are given in the paper for the other two types of bronze.

Card 3/10

Effect of Heat Treatment on Properties and Structure of Beryllium Bronze

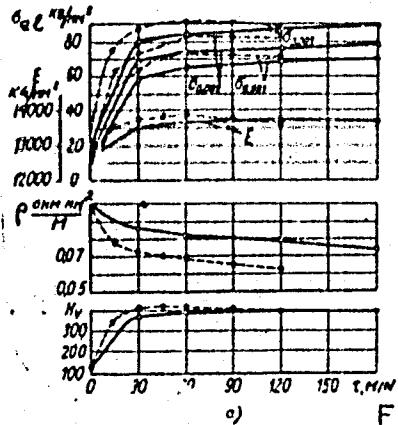
77592
SOV/129-60-2-5/13

Fig. 2a

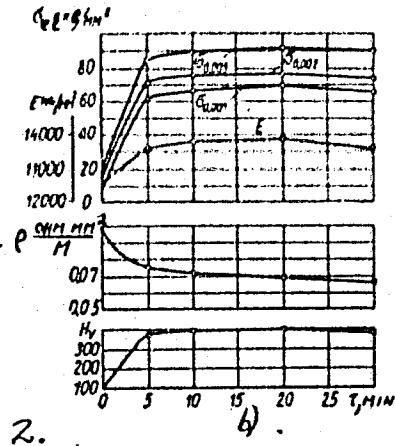


Fig. 2b

See Card 5/10 for caption.

Card 4/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze

77592
SOV/129-60-2-5/13

Caption to Fig. 2 on Card 4/10

Fig. 2. Change of elastic properties, hardness,
and electrical resistance of beryllium bronze Br
B2.5 after tempering. (a) — at 320° C; -----
at 350° C; (b) at 370° C. σ_{el} , elastic limit;
E, modulus of elasticity; ρ , electrical resistance,
 $\text{ohm} \cdot \text{mm}^2$; H_V , Vickers hardness; subscripts at
 $\frac{m}{m}$

$\sigma_{0.005}$, $\sigma_{0.002}$, $\sigma_{0.01}$, residual deformation.

Bronze Br BNT 1.9 has a higher elastic limit than the
other two types of bronze. It also exceeds that in-
dicated in Richards, J., Materials and Methods, Vol 31,
Nr 4, 1950, and in some Soviet references. This may
be ascribed not only to a different method of investiga-

Card 5/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze

77592
SOV/129-60-2-5/13

tion but also to the use of thin strip with a highly homogeneous structure. The rate of relaxation at the initial stress equal to elastic limit (at $\sigma_{0.005}$) is higher after tempering at 320°C for 3 hours than that after tempering at 350°C for 1 hour or at 370°C for 20 minutes (see Fig. 7).

Card 6/10

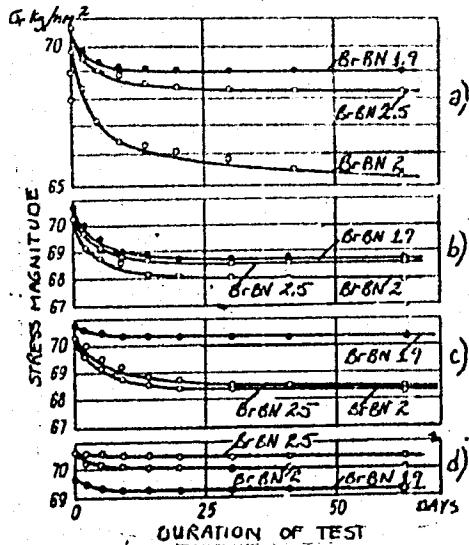
Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze77592
SOV/129-60-2-5/13

Fig. 7. Change of stresses as the result of relaxation of beryllium bronze at 20° C after hardening and tempering. (a) 320° C, 3 hr; (b) 350° C, 1 hr; (c) 370° C, 20 min; (d) 350° C after reduction of 30%.

Card 7/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze77592
SOV/129-60-2-5/13

Plastic deformation following hardening strengthens the bronze and increases its elastic limit and hardness, but affects the modulus of elasticity only slightly (see Fig. 9).

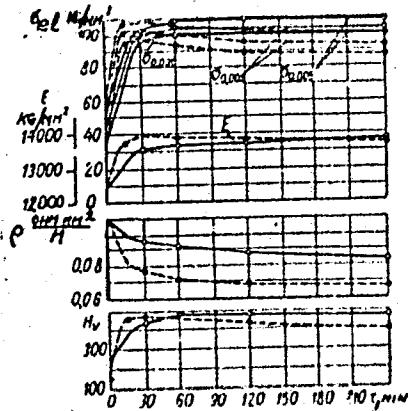


Fig. 9. Change of elastic properties, hardness, and electrical resistance of beryllium bronze Br 2.5 after hardening, cold plastic deformation (reduction 30%), and tempering: — at 300°C ; - - - at 350°C .

Card 8/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze

77592
SOV/129-60-2-5/13

As a result of this study the following conclusions have been made: (1) heat treatment and plastic deformation drastically affect elastic properties and structure of beryllium bronze; (2) tempering at 350-370° C increases elastic limit and modulus of elasticity of hardened bronze which reaches its maximum with a holding time of 1 hour at 350° C and 20 minutes at 370° C; (3) bronzes containing 2 or 2.5% Be behave identically in regard to strengthening. Additions of Ti bring about a further increase of the elastic limit; (4) bronzes with 2.5 and, particularly, with 2% Be are characterized by nonuniform microscopic decomposition in tempering with higher rates of decomposition along grain boundaries; (5) deformation of hardened bronze changes the state of initially hardened solid solution only with high reduction (30 and 50%); (6) tempering of hardened beryllium bronze subjected to plastic deformation promotes the value of elastic limit ($\sigma_{0.001}$ =

Card 9/10

Effect of Heat Treatment on Properties
and Structure of Beryllium Bronze

77592
SOV/129-60-2-5/13

100 kg/mm²). There are 10 figures; 4 tables; and 38 references, 22 Soviet, 12 U.S., 2 German, 1 U.K., 1 French. The 5 most recent U.S. and U.K. references are: Kelly, A., Acta Metallurgica, Nr 8, 1958; Richards, J., ASTM, Spec. Tech. Publication, Nr 129, 1952; Richards, J., Materials and Methods, Vol 31, Nr 4, 1950; Beck, P., Journ. Appl. Physics, Vol 20, Nr 7, 1949; Friedel, J., Phil. Magazine, Vol 44, Nr 351, 1953.

ASSOCIATION: Moscow Higher Technical School imeni Bauman (MVTU imeni Baumana), State Design and Planning Scientific Research Institute for Working of Nonferrous Metals (Giprotsvetmetobrabortka)

Card 10/10

L 38558-66 EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(k)/IJP(c), JD/HM/CD

ACC NR: AT6012405

SOURCE CODE: UR/0000/65/000/000/0295/0300

AUTHORS: Guseva, Ye. A.; Komarov, M. A.; Vorob'yeva, L. P.; Savitskiy, I. A.479
P+1

ORG: none

TITLE: Structural and property changes of the basic metal and welded joints of alloy VT15 during heat treatment

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 295-300

TOPIC TAGS: METAL AGING, MECHANICAL PROPERTY, titanium alloy, metal welding, metal property, weld heat treatment / VT15 titanium alloy

ABSTRACT: The aging process of the basic metal and welded joints of alloy VT15 was experimentally investigated on specimens which (after quenching in water from 600C) had the following properties: $\sigma_2 = 101.5 \text{ kg/mm}^2$, $\sigma_{0.2} = 100.7$; $\delta = 11.7\%$, $\alpha = 6.2 \text{ kg/cm}^2$, bending angle = 75° . The structural, mechanical, and electrical resistance changes after heat treatment were investigated. Quenching temperatures were varied from 650--1100C (quenching in water after 15 min at temperature) and aging temperatures from 300--600C. Curves of resistivity and α as a function of quenching and aging temperature are presented along with sample photographs of the corresponding microstructures, and the results are summarized in two tables. It was

Card 1/2

L 38558-66

ACC NR: AT6012405

found that quenching temperature had little effect on the mechanical properties and microstructure of the base alloy but did affect the metal resistivity (maximum for 800-900C). All the welded joint properties were affected by both the quenching and aging temperatures. It was concluded that the kinetics of structural and phase transformations during heat treatment is different for the base alloy and the welded joints and thus requires detailed study. M. V. Polyanski performed the electron-microscopic studies of the joints. Orig. art. has: 2 tables and 5 figures. 3

SUB CODE: 11, 13/ SUBM DATE: 02Dec65/ ORIG REF: 003

Card 2/2MLP

OZIMOV, B.V., dotsent, kand.tekhn.nauk; VOROB'Yeva, L.V., kand.fiziko-matematicheskikh nauk

Optical properties of milk. Trudy LTIKEP 13:28-34 '57.
(MIRA 13:6)

1. Kafedra obshchey i analiticheskoy khimii i kafedra fiziki
Leningradskogo tekhnologicheskogo instituta kholodil'noy
promyshlennosti.
(Milk--Spectra)

VOROB'YEVA, L.V.; PRUSSAKOVA, N.G.

Spectrum analysis of adrenocorticotrophic hormone (ACTH).
Trudy MIKHP 15:87-91 '58. (MIRA 13:4)

1. Predstavlena Kafedroy fiziki Leningradskogo tekhnologicheskogo
instituta kholodil'noy promyshlennosti.
(Corticotropin--Spectra)

VOROB'YEV A. L. V.

PLATE I BOOK EXPLORATION 307/1297

Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po priemnaiju radiotrojnykh i stabil'nykh izotopov i ikh chuzhnykh v narodnoe polucheniye izotopov. Nauchnoe izdatel'stvo gama-izotopov. Radiometriya i dosimeteriya trudy konferentsii (izotop production, Radiometry and Dosimetry) Transactions of the All-Union Conference on the Use of Radiative and Stable Isotopes and Radiation in the National Economy and Sciences) Moscow, Izd-vo AN SSSR, 1958. 293 p.

Spouzernye Agenziya Akademii Nauk SSSR: Glavnaya upravleniye po ispol'sovaniyu atomnoy energii SSSR.

Editorial Board: Proley, Yu.S. (Rep. Ed.), Zhavoronkov, B.M., V.V. Lashinitskii, N.M., Al'kinsev, K.K., Al'kinsev, Yu.M., Popov, G.I. (Secretary); Tech. Ed., Sintsev, V.V., and Horichov, P.D.

PURPOSE: This collection is published for scientists, technologists, persons engaged in medicine or medical research, and others concerned with the production and/or use of radioactive and stable isotopes and radiation.

CONTENTS: Thirty-eight reports are included in this collection under three main subject divisions: 1) production of isotopes; 2) high-energy gamma-radiation facilities; and 3) radiometry and dosimetry.

TABLE OF CONTENTS:

PART I. PRODUCTION OF ISOTOPES

Proley, Yu.S., V.Y. Bochkarev, and Ye.Ye. Kulish. Development of Isotope Production in the Soviet Union. This report is a general survey of production methods, apparatus, raw materials, applications, investigations, and future prospects for radio isotopes in the Soviet Union. Card 2/12

Zagirov, L.Y., K.M. Kalugin, and Yu.M. Shvartsenberg. Set-up for Measuring Individual Doses of Gamma-rays Within a Wide Range 220

Lamplikovskiy, V.K. The Use of a Diffusion Chamber for Measuring Low Activity 225

Sol'dik, G.R., and A.M. Vyal'shina. Pocket Radiometers and Dosimeters 238

General description and electrical circuit diagrams are given for a pocket-size liquid scintillation radiometer intended for problems of detection of low activity of gamma- and hard beta-ray isotopes above 1 Mev. The tube after one of radiation registration serves as a parameter for the determination of intensity up to 1000 μ r/hr with an accuracy of 20 percent. Working principle, components and electric circuit diagrams are given for a pocket-size dosimeter capable of detecting approximate intensities of gamma- and beta-radiation from 0.1 to 5000 μ r/sec and

Card 10/12

and above 0.1 Mev, respectively.

unreleasable

VOROB'YEVA, M.

30877. VOROB'YEVA, M., VYSKREBENTSEVA, E., AND KURSANOV, A.

M-Inozit v list'yakh chaya i puti yego obrazovaniya. Doklady Akad. nauk SSSR, Novaya seriya, T. LXVIII, No. 4, s. 734-40. -- Bibliogr: 8 nazv.

S/282/63/000/001/001/011
A059/A126

AUTHORS: Klinov, I.Ya., Vorob'yeva, M.A.

TITLE: The resistance to corrosion of some alloyed steels and titanium
under the conditions of synthetic acetic acid production

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk, 47. Khimicheskoye i kholo-
dil'noye mashinostroyeniye, no. 1, 1963, 2, abstract 1.47. 4
(Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn. ekon. issled. Gos.
kom-ta Sov. Min. SSSR po khimii, no. 5, 1962, 41 - 44)

TEXT: The results are given of tests which have been performed under con-
ditions resembling those found in operations on chrome, chrome-nickel, chrome-
nickel-molybdenum, and chrome-molybdenum steels of the grades X25T (Kh25T),
X17T (Kh17T), 1X18H9T (1Kh18N9T), OX21H5T (OKh21N5T), 1X18H12M2T
(1Kh18N12M2T), 1X18H12M3T (1Kh18N12M3T), OX21H6M2T (OKh21N6M2T),
X27H4M1T (Kh27N4M1T), X17M2T (Kh17M2T), X25M2T (Kh25M2T), and also on
commercial titanium BT-1 (VT-1). Sheet steel, seamless tubes with untreated
and turned surfaces, respectively, and also sheet steel samples having a welded

Card 1/2

8/282/63/000/001/001/011

A059/A126

The resistance to corrosion of some alloyed

joint were tested. The pipes were first heated to 700°C for 1 h and then cooled down in the air. Welding of the Kh17M2T steel was performed in argon atmosphere using a strip of the same steel as filler material. Commercial titanium VT-1 was also tested in the form of sheets, tubes and welded samples. From the test results it can be concluded that low-nickel steels, chrome-nickel steel OKh21N5T, and chrome-nickel-molybdenum steel OKh21N6M2T and Kh27N4M1T are corroded in solutions of acetic acids and a mixture of the oxidation products of n-butane to the same extent as the currently used steels 1Kh18N9T and Kh18N12M2T. Hence, under the conditions given, OKh21N5T grade-steel can be used instead of 1Kh18N9T, and OKh21N6M2T and Kh27N4M1T grade-steels instead of 1Kh18N12M2T. Chrome-molybdenum steel Kh17M2T is less resistant to the mixture mentioned containing more than 3% of formic acid at 140°C. Commercial-grade titanium VT-1 in a mixture of the oxidation products of n-butane containing up to 10% of formic acid at 140 and 160°C is not subjected to corrosion at all.

[Abstracter's note: Complete translation]

Card 2/2

VOROBYEVA, M. A.

PRIKHOD'KO, A. F.

24(7) p.3 PHASE I BOOK EXPLOITATION Sov/1365
L'vov. UniversitetMaterialy X Vsesoyuznogo soveshchaniya po spektroskopii. t. 1:
Molekul'arnaya spektroskopiya (Papers of the 10th All-Union
Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy)
(L'vov) Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies
printed. (Series: Its: Fizichnyy sbornik, vyp. 3/8)Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po
spektroskopii. Ed.: Gazer, S.I.; Tech. Ed.: Saranyuk, T.V.;
Editorial Board: Landsterg, G.S., Academician (Resp. Ed., Deceased),
Reporat, B.S., Doctor of Physical and Mathematical Sciences,
Fabelinskii, I.L., Doctor of Physical and Mathematical Sciences,
Fabrikant, V.A., Doctor of Physical and Mathematical Sciences,
Kornitavii, V.G., Candidate of Technical Sciences, Raskin, S.M.,
Candidate of Physical and Mathematical Sciences, Klimovskiy, L.N.,
Candidate of Physical and Mathematical Sciences, Miliyarchuk, V.S.,
A. Ye., Candidate of Physical and Mathematical Sciences, and Glauberman,
Candidate of Physical and Mathematical Sciences.

Card 1/30

Sverdlov, L.M. Calculation and Interpretation of the Vibrational Spectra of Olefins	278
Sverdlov, L.M., and Ye. P. Kraynov. Vibrational Spectra and Potential Energy Constants of Cyclo- Propane and Deuteriocyclopropane	282
Gorban', I.S., and A.A. Shishlovskiy. The Anomalous Dispersion of Light in Diluted Solutions	286
Lubchenko, A.Y. Light Dispersion in the Absorption Range of Impurity Centers	289
Yakovlev, O.M., D.S. Gorbenko-Germanov, R.A. Zenkova et al. Study of Binary Americium Sulfates Using Absorption Spectra in Crystals	292
Vorobeva, M.A. Birefringence of Some Organic Crystals With A Long-chain Molecular Structure	297

Card 19/30

VOROB'YEVA, M.A.; KLINOV, I.Ya.

Studying the corrosion of various alloys in fatty acids.
Trudy MIKHM 28:55-69 '64. (MIRA 19:1)

YUNG, V.N.; VOROB'YEVA, M.A.

Conditions for stabilizing clinker compounds under temperatures
below sintering. Trudy MKHTI no.21:137-143 '56. (MIRA 9:9)
(Silicates)

Vorobjeva, M.A.

PHASE I BOOK 1 LINE 108 Sov/3556

Patkov, *Inzhenerno-fizichesky Institut*
Biblioteky rospory eksperimental'noy fiziki; [aberratsii] typ. 2
(Some Problems in Experimental Physics; Collection of Articles
(Laboratory) apparatus, and automatic and telemechanic equipment.
Nr. 2) Moscow, Atomizdat, 1959. 123 p. 3,200 copies printed.

Sponsoring Agency: RERJN, Ministerstvo vysashego i srednego
spetsial'nogo obrazovaniya.

Ed.: B.M. Stepanov. Doctor of Physical and Mathematical Sciences,
Professor. Tech. Ed.: S.M. Popova.

PURPOSE: This collection of articles is intended for graduate
engineers and physicists engaged in the design of physical
(laboratory) apparatus, and automatic and telemechanic equipment.

CONTENT: This collection of articles on experimental physics was
written by members of the Moscow Physics and Engineering Institute
and each article is accompanied by drawings and references.
Title: *Gas-Discharge Counters During Over-Loading Pulses*
Authors: B.A. B. L. Gol'dinov, and V. I. Pashkov
Operation of
Gas-Discharge Counters During Over-Loading Pulses 32

The authors deal with the results of a study of the operation
of the MS-9, GS-9, and GS-30 standard counters under controlled
pulse feed operating conditions. The dependence of ionization
memory on pulse feed conditions was studied and a simple
method of measuring discharge propagation speed along the counter
electrode is described.

Vlasov, A.P. *Lenses Compenzating the Effect of Intersection
Of Particles in a Linear Proton Accelerator*
The problem of compensating the unfavorable effect of inter-
action of particles on radial oscillations of particles in a linear
accelerator is discussed. 40

Zhdanov, I. Ye. *Calculating the Profiles of Magnetic Poles*
The article describes a method of computing profiles of the
poles of a tapered and a sharped partition for a given
field distribution in the plane of symmetry (the fringe effect
is not taken into account).

Yakovlev, A.P. *Some Zeros: Optical Properties of Static Axially
Symmetric Magnetic and Electric Fields*
The author reports on the nonlinear study of the ionic optical
properties of crossed, axially symmetric, sectoral type electro-
static and magnetic fields with unequal arm focusing and edges
of arbitrary form. 50

Vorobjeva, M.A. *Sensitivity of the Glowing Dot Method*
Properties of MS-9000 and Electric Fields 54

The author reports on the results of the sensitivity of the ionic optical
properties of crossed, axially symmetric, sectoral type electro-
static and magnetic fields with unequal arm focusing and edges
of arbitrary form.

Vorobjeva, M.A. *Polarization of Flux of α -rays*
Some Aspects 69

Polarization of α -rays. Hot Transfer During Turbulent Heat Flow 92

Reynolds Number, Heat Transfer, and Turbulence 96

In Heat-Transfer Channels 96

The author describes experimental results on heat transfer of
water in various channels for 2 ratios of h_1/h_2 and
various characteristics of the channel. An attempt is made to relate
the results to the theory of the laminar boundary layer and
to empirical formulas for every formula for various
special cases.

Reynolds Number, Heat Transfer, and Turbulence 100

Experimental Results on Heat Transfer in Heat-Transfer Systems 100

Vorobjeva, M.A. *Some Properties of a Radio Spur*
Electrostatic Spur 117

The author describes the properties of a radio spur and
a radio spur device. The device is a high-vacuum tube
with a special anode. The anode is a spherical electrode.

S/081/61/000/022/074/076
B144/B138

AUTHORS: Klinov, I. Ya., Vorob'yeva, M. A.

TITLE: Chemical resistance of some coating materials and their use
in protecting chemical apparatus from corrosion

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1961, 483, abstract
22P283 (Tr. Mosk. In-ta khim. mashinostr., v. 22, 1960,
159 - 168)

TEXT: The chemical resistance to the direct effect of aggressive media
was studied in the following compounds: $\text{HCR}(\text{PSG})$, $\text{H}-2$ ($\text{PS}-2$), and
 HT (PT) type polyisobutylene (I), a combination of I and $\text{HOB}-30$ ($\text{POV}-30$)
and $\text{HOB}-50$ ($\text{POV}-50$) type polyethylene, "Brisol", "Relin", and 829-, 1976-,
and 2566-type rubbers. Corrosion resistance was estimated from the degree
of swelling and the variations in the physical and mechanical properties
of the coating. Relin is not suitable as an anticorrosive material,
Brisol is stable in weakly acid and low-alkaline media at 60°C , its chemi-
cal resistance is higher than that of ruberoid. 829-, 1976-, and 2566-
-type rubbers are stable in up to 50% H_2SO_4 at $60 - 90^\circ\text{C}$ and unstable

Card 1/2

Chemical resistance of some ...

S/081/61/000/022/074/076
B144/B138

in 20% HCl and HNO₃. HNO₃ causes the destruction of the material, which explains the reduction in the mechanical stability of PSG and POV-30. I PS-2 shows the highest HNO₃ resistance. Coatings on PSG, PS-2, POV-30, and POV-50 basis are resistant to HCl and to H₂SO₄ up to 75% at 60°C. POV-30 and POV-50 can withstand the effect of 92% H₂SO₄ up to six months. Data are given on the chemical stability of bonded and welded seams with regard to different aggressive media, when adhesives nos. 8 and 88, I solution and carbinol glue are used. [Abstracter's note: Complete translation.]

Card 2/2

24.7000
S/051/62/012/006/012/020
E039/E420

AUTHOR: Vorob'yeva, M.A.
TITLE: The sensitivity of the radiant point method. III
PERIODICAL: Optika i spektroskopiya, v.12, no.6, 1962, 765-768
TEXT: The effect of the appearance of a transition region between two regions of refractive index μ_1 and μ_2 on the sensitivity of the radiant point method is examined more rigorously than in an earlier work. The reduction in intensity is shown by the values of light intensity J given by

$$J_{\max} = 1 + 2\pi n \Delta$$

and

$$J_{\min} = 1 - 2\pi n \Delta$$

The parameter Δ is plotted as a function of β for values of $\beta = 0, 0.7$ and 1.0

$$\beta = x \sqrt{2/z\lambda} \quad \text{and} \quad \beta = b \sqrt{2/z\lambda}$$

When $\beta = 0.7$ the maximum value of Δ is at $\beta = 0.65$ and is

Card 1/2.

S/051/62/012/006/012/020

E039/E420

The sensitivity of the radiant ...

very near to the corresponding value at $\beta = 0$. When $\beta = 1$ the maximum occurs at near $\beta = 1$. The values of Δ attain the experimental values at $\beta = 0.7$ and are plotted as a function of β for this condition. $\Delta = 0.5$ at $\beta = 0$ and 0.25 at $\beta = 0.7$. A value for the visibility V is also calculated as a function of Δ .

$$V = \frac{J_{\max} - J_{\min}}{J_{\max} + J_{\min}} = 6.3n$$

Values of n are given for which the nonuniformity ceases to be obvious, typically $n = 0.0144$ at $\beta = 0.7$. Values of β up to 0.3 Fresnel zones have no influence on the sensitivity of the method. There are 3 figures and 2 tables.

SUBMITTED: May 4, 1961

Card 2/2

8/081/61/000/010/007/029
B117/B207

AUTHORS: Klinov, I. Ya., Vorob'yeva, M. A., Borisova, A. S.

TITLE: Study of the corrosion resistance of aluminum in sulfuric acid and mixture

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 285, abstract 10M193 (10I193). ("Tr. Mosk. in-ta khim. mashinostr.", v. 22, 1960, 96-104)

TEXT: The corrosion rate of aluminum of all types was found to increase with the H_2SO_4 concentration, and to reach its maximum in 80% H_2SO_4 (up to

1.2 - 1.3 g/m² hr). It is pointed out that rolled aluminum tends to regular corrosion, whereas cast aluminum tends to intercrystalline cracking. The corrosion rate of all types of aluminum increases considerably at a temperature rise from 20° to 80°C, in any H_2SO_4 concentration. Rolled aluminum of the AB-000 (AV-000) and A-00 (A-00) types, as well as

Card 1/2

Study of the corrosion resistance...

S/081/61/000/010/007/029
B117/B207

A-1 (A-1), may be used in low-concentrated H_2SO_4 at $20^{\circ}-25^{\circ}C$. [Abstracter's
note: Complete translation.]

Card 2/2

VOROB'YEVA, M.A.

Sensitivity of the radiant point method. Part 3. Opt. i spektr.
12 no. 6:765-768 Je '62. (MIRA 15:5)
(Diffraction)

KLINOV, I.Ya.; VOROB'YEVA, M.A.

Chemical stability of certain lining materials and their use for
the protection of chemical apparatuses from corrosion. Trudy
MIKHEM 22:159-168 '60. (MIRA 14:1)

(Resins, Synthetic)
(Corrosion-resistant materials)

VOROB'YEV, M. A.

PLATE 1 BOOK EXPLORATIONS

507/52

Vsesoyuznoye nauchnoye obshchestvo obshchego tekhnologicheskogo stabilizatora, "Pl. 1 (Sistemnye i Sistemnye shemy stroya i tekhnologii stroya i proizvodstva sialikatov, No. 1) Collection of articles on Chemistry and Production of Alkaloids, No. 1, Printed, Gosstroyizdat, 1959. 105 p. Errata slip inserted.

Editorial Board: M. A. Matveev (Sup. Ed.), Yu. N. Burt, and N. D. Rubashchikov. Ed. of Publishing House: V. A. Kostrov. Tech. Eds.: S. I. Sushkova.

PREVIEW: This booklet is intended for chemists and geologists interested in silicate analysis.

content. This is a collection of articles on the chemistry and technology of alkaloids. The contributing authors discuss the effect of structures on alkaloids and on the properties of Portland cement. The tasks also discuss the properties and on the properties of certain materials, the properties of certain materials, the properties of solid solutions of calcium ferrite, the activation of cement, the production of alkaline cement, the preparation of pulping rolls, the interaction of cement with lime, and various problems related to the production of silicate-calcium materials. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

Sil'vestrovich, S. I. The Properties of Fluoride and Phosphate Spallation	3
Emelyanov, I. I., and T. N. Ovchirich. The Effect of Small Additions of Certain Oxides on the Process of Sintering Alumina	14
Mashchova, N. S., and A. I. Mayer. Petrographic Investigation of Processes Occurring During Annealing and Cooling of Ceramic Materials	20
Grushko, G. A. Intensifying the Process of Drying Fetting Tile During Calcination	22
Burt, Yu. N., and V. V. Tishinov. Stability of Solid Solutions of Calcium Alkaloferrite with Increased Temperature	45
Emelyanov, I. I., and N. N. Norkin. The Effect of Certain Additives on the Physical and Chemical Properties of Magnesia-rich Portland Cement	52
Grishberg, Z. D., and N. I. Berezovskaya. Activating Cement by Grinding in Vibratory Mills	59
Mashchova, N. S., and Yu. N. Koval'ev. On the Production of Alkaline Cement by Sintering in Rotary Mills	70
Mashchova, N. S., and A. I. Mayer. New Method for the Preparation of Pulping Rolls	76
Matveev, M. A., and G. V. Geraschenko. Increasing the Strength of Quartz-Calcium Pulping Rolls	82
Burt, Yu. N., and A. I. Mayer. Quartz-Calcium Interaction at Temperatures Below 1000°	88
Sushkova, S. I., and O. V. Kuntsevitch. Some Problems in the Production of Silicate-Calcium Materials	100
AVAILABLE: Library of Congress	
CARD 3/2	

EN/AB

5-18-60

VOROB'YEVA, M.A.

Birefringence of crystals of the aliphatic series. Nek. vop.
eksp. fiz. no.1:76-86 '59. (MIRA 13:2)
(Refraction, Double)
(Aliphatic compounds--Optical properties)

VOROB'YEVA, M.A.

Sensitivity of the luminous point method. Nek.vop.eksp.fiz.
(MIRA 13:2)
no.2:69-79 '59.
(Refraction) (Diffraction)

VOROB'YEVA, M. A.

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62363

Author: Yung, V. N., Vorob'yeva, M. A.

Institution: None

Title: Conditions of Stable Existence of Clinker Compounds at Temperatures
Below Sintering

Original
Periodical: Tr. Mosk. khim. tekhnol. in-ta, 1956, No 21, 137-143

Abstract: A study was made of the behavior of clinker minerals and of industrial clinkers at temperatures below sintering. All the specimens were held for a definite length of time at 600, 700, 800, 900, 1,000, 1,100, 1,200°. It was found that tricalcium silicate as such is not stable at a temperature below sintering and maintained within the limits of 800-1,200° it splits off free Ca oxide. At these temperatures free lime is also liberated from Ca alumoferrites and tricalcium aluminate which are present in the clinker. In a reducing

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Silicates.
Glass. Ceramics. Binders, I-9

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62363

Abstract: medium iron-containing minerals of the clinker undergo decomposition to a greater extent. Investigations of the properties of clinkers which had been subjected to the above-described thermal treatment, have shown that free lime liberated in the course thereof has no detrimental effect on uniform change in volume and strength of the cement, in contrast with the free lime which has not been taken up in the sintering zone.

Card 2/2

VOROB'YEV, Kh.S.; VOROB'Yeva, M.A.

Effect of various admixtures on physical and mechanical properties
of magnesian portland cements. Silikaty no.1:52-58 '59.
(MIRA 13:2)
(Portland cement)

VOROB'YEVA, M. A.

VOROB'YEVA, M. A. --"Conditions for the Stable Existence of Cinder Compounds at Temperatures below Sintering Temperatures." Min Higher Education USSR. Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhanay letopis'
No 2, 1956

KLINOV, I.Ya.; VOROB'YEVA, M.A.; BORISOVA, A.S.

Investigating the corrosion resistance of aluminum in sulfuric acid
and "melange." Trudy MIKHM 22:96-104 '60. (MIRA 14:1)
(Aluminum--Corrosion) (Sulfuric acid)

KLINOV, I.Ya., doktor tekhn.nauk; VOROB'YEVA, M.A.

Behavior of some plastic materials under conditions of the
production of synthetic acetic acid by n-butane oxidation.

Khim.prom. no.10:769-772 0 '62.

(MIRA 15:12)

(Plastics—Testing)
(Acetic acid) (Butane)

VOROB'YEVA, M.A.; KLINOV, I.Ya.

Effect of various factors on the corrosion rate of stainless steels
in acetic acid solutions. Izv.vys.ucheb.zav.; khim. i khim.tekh. 7
no.2:327-334 '64. (MIRA 18:4)

1. Moskovskiy institut khimicheskogo mashinostroyeniya, kafedra
korrozii khimicheskoy apparatury.

BR

ACCESSION NR: AP4041686

S/0153/64/007/002/0327/0334

TITLE: Effect of different factors on the corrosion rate of stainless steels in acetic acid solutions.

AUTHOR: Vorob'yeva, M. A., Klinov, I. Ya.

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 7, no. 2, 1964, 327-334

TOPIC TAGS: stainless steel, corrosion, acetic acid corrosion, aeration, acetic formic acid corrosion, electrochemical behavior, activation passivation, chromium nickel steel, chromium nickel molybdenum steel, anodic polarization, cathodic polarization, corrosion resistance

ABSTRACT: The effects were studied of aerating and of admixing up to 10% formic acid on the rate of corrosion and the electrochemical behavior of Cr-Ni and Cr-Ni-Mo steels (1Kh18N9T, 1KhNi2M2T, OKh21N5T and OKh21N6M2T) in 60, 80 and 90% acetic acids at 18, 60 and 90C. The anodic and cathodic polarization and the rate of corrosion in Cr-Ni steels in 60 and 90% acetic acid at 18 and 60C was affected

Card 1/3

ACCESSION NR: AP4041686

little by the admixture of up to 5% formic acid; the rate of corrosion of the Cr-Ni steels was insignificant under these conditions. At 90C the admixture of formic acid retarded the anodic polarization of the investigated steels in 60 and 90% acetic acid with the anodic polarization of the Cr-Ni steels being hampered more by an increase in formic acid content than the anodic polarization of the Cr-Ni-Mo steels. The Cr-Ni and Cr-Ni-Mo steels were polarized more readily and their rate of corrosion was less upon application of anodic current in aerated acetic acid solutions containing formic acid than in unaerated solutions of the same concentration. All the steels investigated were converted to the active state in unaerated acetic acid solutions containing admixtures of formic acid after treatment with cathodic current; the Cr-Ni-Mo steels were activated in solutions containing higher formic acid content. The Cr-Ni steels 1Kh18N9T and 0Kh21N5T do not withstand the action of 60 and 90% acetic acids with formic acid at 90C or boiling temperature. The corrosion resistance of the Cr-Ni-Mo steels is not sufficient at 90C in unaerated 60 and 90% acetic acid solutions containing 3% formic acid. Orig. art. has: 3 figures and 2 tables

Card 2/3

ACCESSION NR: AP4041686

ASSOCIATION: Kafedra korrozi khimicheskoy apparatury, Moskovskiy institut
khimicheskogo mashinostroyeniya (Department of Corrosion of Chemical Apparatus,
Moscow Institute of Chemical Machinery Construction)

SUBMITTED: 10May63

ENCL: 00

OTHER: 004

SUB CODE: MM, CC

NR REF Sov: 003

Card 3/3

VOROB'YEVA, M.D., tekhnik; DUSHIN, B.M., inzh.; FASTOVETS, O.S., inzh.

New developments in the processing of split leather. Kozh.-obuv.
prom. 2 no. 12:32-33 D '60. (MIRA 14:1)
(Leather)

Vorob'yeva, M.I.

VOROB'YEVA, M.I., kandidat tekhnicheskikh nauk, redaktor; POPOVA, S.M.
tekhnicheskiy redaktor

[Modern technology of precision casting using fusible patterns;
proceedings of a session] Sovremennaya tekhnologiya tochnogo
lit'ia po vyplavliaemym modeliam; trudy sessii. Pod red.
M.I. Vorob'eva, Gos. nauchno-tekhn. izd-vo mashinostroit.
lit-ry. 1954. 106 p. (MLRA 8:8)

1. Vsesoiuznoye nauchnoye inzhenerno-tekhnicheskoye obshchestvo
liteyshchikov, Moscow.
(Founding)

VOROB'YEV, MI.
CA

112

meso-Inositol in tea leaves and its formation paths.
A. L. Kursanov, M. Karpikova, and E. Vyskrebetsova.
Doklady Akad. Nauk S.S.R. 68, 737-40 (1949); cf.
C.I. 44, 1172b. —All inositol in tea leaves (Georgian-
unstated species) is shown to be *meso*-inositol by chem.
analysis (Smirnov, *C.I.* 30, 4824*) and by biol. method
in cultivation of *Saccharomyces carlsbergensis*, capable of
utilizing only the *meso* form. Infiltration into the leaves
of solns. of glucose, fructose, sucrose, and glucose 1-phos-
phate leads only to *meso*-inositol formation, part of which
is in free state, but the bulk forms some other compds.
from which *meso*-inositol can be obtained by 12-hr. hy-
drolysis with 22% H_2SO_4 . The synthesis from sucrose is
3 times faster than that from glucose, probably caused
by the presence of the glucoside link; results with glucose
1-phosphate are similar to those with sucrose. Maltose
✓ not utilized, nor is rhamnose, glyceraldehyde, and
glycolaldehyde, as well as glycerol and pyruvic acid.
G. M. Kosolapoff

VOROB'YEVA, M. M.

Dissertation: "The Significance of Adenosinetriphosphoric Acid in the Reproduction of the Influenza Virus." Cand Biol Sci, Acad Med Sci USSR, 17 Jun 54. (Vechernaya Moskva, Moscow, 8 Jun 54)

60: SUM 318, 23 Dec 1954

VIRUSOLOGY

USSR/Medicine - Virology

Card 1/1 :

Authors : Tsvetkov, N. I., and Ivanovskaya, T. I.

Title : Effect of adenosinetriphosphoric acid on the multiplication of influenza virus

Periodical : Dok. Akad. Nauk SSSR, 91, 718, August 11, 1954

Abstract : Microbiological data on the effect of adenosinetriphosphoric acid on the multiplication of influenza virus. Fifteen references.

Institution : Inst. of Med. Microbiology, N. I. Ivanovskiy Institute of Virology

Presented by : Academician V. A. Baperhardt. April 21, 1954

VOROB'YEVA, M. M.

20-2-52/62

AUTHOR

TITLE

PERIODICAL

ABSTRACT

VOROB'YEVA, M.M.

The Proteins of Bacterium Paracoli, as Affected by Phage
(Vliyaniye faga na belki Bakterium paracoli. Russian)
Doklady Akademii Nauk SSSR, 1957, Vol 115, Nr 2, pp 385-388 (U.S.S.R.)

In the present work the electrophoresis method was used for the investigation of the protein of the B. paracoli during the latent period of development of the phage. From 2 illustrations it may be seen that the greatest changes occur in the protein fractions I and II which move in the electric field. A strong reduction to complete disappearance of the protein was observed. Also the proteins (fraction IV) moving quickest decreased. Thus we state the disturbance of several protein fractions in the case of an infection of the phage by means of bacteriae. It does not seem impossible that their decomposition products are used for the formation of the virus particles. No new protein fraction could be discovered in connection with the increase of phage. The electric photo-diagrams of the B. paracoli - proteins bred on meat-broth on glucose, were greatly different from those grown without glucose; this went so far that they could be taken for proteins of other kinds of bacteriae. Also here several protein fractions decreased, but less intensively inspite of the more intensive development of phage in consequence of the addition of glucose. Also the development of the bacteriae themselves is accelerated by glucose.

Card 1/2

20-2-52/62

The Protein of Bacterium Paracoli, as Affected by Phage

With this addition the bacteria are less liable to be destroyed by phage. Glucose increases the intensity of the synthesis processes so that the requirements of the phage can apparently be satisfied by the absorption of nutritive substances from the external sphere. These differences can, however, also have been caused together with the changes of protein excretion by bacteria into the nutritive soil.
(3 illustrations and 2 Slavic references).

ASSOCIATION

Institute for Virusology im. D.I. Ivanovskiy of the Academy of Medical Sciences of the U.S.S.R.

(Institut virusologii im. D.I. Ivanovskogo Akademii meditsinskikh nauk SSSR)

PRESENTED BY

ENGEL'GARIN, V.A., Member of the Academy, April 10, 1957

SUBMITTED

8.4.1957

AVAILABLE

Library of Congress

Card 2/2

VOROB'YEVA, M.M.

Adenosinetriphosphatase in *B. paracoli* during the latent period of phage development. Vop. virus. 4 no.1:100-103 Ja-F '59. (MIRA 12:4)

1. Laboratoriya biokhimii Instituta virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

(PARACOLOBACTRUM, metabolism,
ATPase in various stages of phage develop. (Rus))

(BACTERIOPHAGE,
of Paracolobactrum, ATPase activity during various stages of develop. (Rus))

(ADENYLICPYROPHOSPHATASE,
in Paracolobactrum, in various stages of phage develop.
(Rus))

VOROB'YEVA, M.M.

Effect of the culture medium on proteins in paracolon bacilli. Vop.
med.khim. 5 no.4:251-253 Jl-Ag '59. (MIRA 12:12)

1. Laboratoriya biokhimii Instituta virusologii imeni D.I. Ivanovsko-
go AMN SSSR, Moskva.
(PARACOLORBACTHUM metab.)
(PROTEINS metab.)

VOROB'YEVA, M.S.

Experimental study of humoral immunity in reptiles infected by
tick-borne encephalitis virus. Vop. virus. 10 no.1:36-41 Ja-F
(MIRA 18:5)
'65.

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR,
Moskva.

VOROB'YEVA, M.S.; LEVKOVICH, Ye.N.

Sensitivity of cold-blooded animals to the virus of tick-borne encephalitis. Zool. zhur. 43 no.7:1084-1087 '64.

(MIRA 17:12)

1. Institute of Plyomyelitis and Viral Encephalites, Academy of Medical Sciences of the U.S.S.R., Moscow.

VOROB'IEVA, M.T., kand. tekhn. nauk

Use of metrology and mathematical statistics in the quality
control of woodpulp production. Bum. prom. no.3:3-7 Mr '64.
(MIRA 17:3)

1. Moskovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta tselyulozno-bumazhnoy promyshlennosti.

SHESAREV, K.A.; VOROB'YEVA, M.T.; AGEEV, M.Ye.

Rapid method for determining the temperature of colophony
softening. Gidroliz. i lesokhim. prom. 9 no.4:17-18 '56.
(MLRA 9:11)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy
institut.
(Gums and resins)

SNESAREV, Kirill Andreyevich; ZARAKOVSKAYA, Anna Iosifovna; VOROB'YEVA,
Mariya Trofimovna; SUMAROKOV, V.P., red.; IOFIMOVA, TS.B., red.
izd-va; PARAKHINA, N.L., tekhn.red.

[Metrological principles of the analytical control of chemical
industries] Metrologicheskie osnovy analiticheskogo kontrolya
khimicheskikh proizvodstv. Moskva, Goslesbumizdat, 1960. 205 p.
(MIRA 13:9)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut
(for Sumarokov).

(Chemistry, Analytic--Quantitative)

Vorob'yeva, M.T.

USSR/Chemical Technology - Chemical Products and Their
Application. Wood Chemistry Products. Hydrolysis Industry

I-9

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2666
Author : Snesarev, K.A., Vorob'yeva, M.T.
Inst : -
Title : Evaluation of the Color of Turpentine.
Orig Pub : Gidroliznaya i lesokhim. prom-st', 1957, No 5, 17-18

Abstract : To measure the intensity of turpentine coloration a method of equalizing is proposed. The mean quadratic error of this method is of ± 1.7 mm, or $\pm 4\%$. The adopted norm of turpentine coloration is equal to that of a column of a type solution (solution of potassium bichromate of a concentration of 0.0125 g/liter) measuring 90 mm.

Card 1/1

POKROVSKAYA, N.V.; VOROB'YEVA, M.T.

Development of the methods for obtaining glucose oxidase preparations.
Trudy TSentr.nauch.-issl.inst.piv., bezalk. i vin.prom. no.9:69-78
'62. (MIRA 16:10)

VOROB'YEVA, M.T.

SNESAREV, K.A.; VOROB'YEVA, M.T.

Evaluation of turpentine color. Gidroliz. i lesokhim.prom. 10
(GLRA 10:3)
no. 5:17-18 '57.

1.Tsentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Turpentine--Standards)

VOROB'YEVA, M.T.
SNESAREV, K.A. : VOROB'YEVA, M.T.

Apparatus for determining the softening temperature of wood
pitch and abietic tar. Gidroliz. i lesokhim. prom. 9 no.8:
17 '56. (MLRA 10:2)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut.
(Chemical apparatus) (Pitch) (Tar)

SNESAREV, K.A.; VOROB'YEVA, M.T.; ZARAKOVSKAYA, A.I.

Rapid method for determining moisture in gum. Gidroliz.
i lesokhim. prom. 9 no.4:19 '56. (MLRA 9:11)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy
institut.
(Gums and resins)

SNESAREV, K.A., doktor khimicheskikh nauk; VOROB'YEVA, M.T., nauchnyy sotrudnik.

Speedy method for determining the temperature of rosin softening without using mercury. Der. i lesokhim.prom. 2 no.9:15-17 S '53. (MLRA 6:8)

1. TsNILKhI.

(Gums and resins)

SMESAREV, K.A.; VOROB'YEVA, M.T.

Present state and objectives for the improvement of the quality control
of rosin. Sbor. trud. TSNILKHI no.12:151-166 '57. (MIRA 13:10)
(Gums and resins—Quality control)

SNESAREV, K. A. ; VOROB'YEVA, M. T.

Method and standards for the selection of rosin samples. Sbor. trud.
TSNILKHI no.13:129-140 '59. (MIRA 13:10)
(Gums and resins)

VOROB'YEVA, N.A.; KAGAN, Yu.M.; MILENIN, V.M.

Electron velocity distribution in a positive column in a
gaseous mixture. Zhur. tekhn. fiz. 34 no. 5:828-832 My'64
(MIRA 17:8)

1. Leningradskiy gosudarstvennyy universitet imeni Zhdanova.

2-22-67

EWG/111/EDS/EGC/11-2--AFRTC/ASD/ESD-3--P1-4/Po-4--

10

ADDRESS: R. R. 1, AP 111

卷之三

AUTHOR: Vorob'yeva, A. A.; Kagan, Yu. M.; Milenin, V. M.

66

ABSTRACT. Velocity of electrons in the positive column of a mercury discharge. Part one

SOURCE: *Zhurnal tehnicheskoy fiziki*, v. 33, no. 5, 1963, 571-575

TOPIC TAGS: electron velocity distribution, plasma, discharges

ABSTRACT: The velocity distribution of electrons in discharges, an important parameter of the carrier, is determined experimentally by many methods. The results of these methods are compared.

Card 1/2

11. *Leucosia* (Leucosia) *leucostoma* (Fabricius) (Fig. 11)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R00186

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860830007-8"

L 9921-63

ACCESSION NR: AP3000013

cylindrical and spherical probes were used. The measurements were carried out at pressures from 10^{-4} to 10^{-1} mm Hg, and for discharge current values from 1.0 to 1.5 amperes. The quantities measured were the probe current and the second derivative for different values of the potential between the probe and the plasma. The apparatus was connected to the network through a bridge circuit.

ADD. L. A. A. Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova
(Leningrad State University)

SUBMITTED: 06 Apr 62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: PH NR REF Sov: 004 OTHER: 004

1m/ja
Card 2/2

VOROB'YEVA, N.A.; KAGAN, Yu.M.; MILENIN, V.M.

Electron distribution function in a positive discharge column in
neon and helium. Zhur.tekh.fiz. 34 no.11:2079-2081 N '64.

(MIRA 18:1)

1. Leningradskiy ordena Lenina gosudarstvennyy universitet imeni
A.A.Zhdanova.

VOROB'YEVA, N. A.; KAGAN, Yu. M.; LYAGUSHCHENKO, R. I.; MILENIN, V. M.

3

"The Energy Distribution of Electrons in the Discharge of the Positive Column."

report submitted to 11th Intl Spectroscopy Colloq, Belgrade, 30 Sep-4 Oct 63.